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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/721,295	11/26/2003		Yuji Sugimoto	03-039	5488	
23400	7590	05/31/2006		EXAMINER		
POSZ LAV 12040 SOU		•	DINH, TUAN T			
SUITE 101		2214.2	ART UNIT	PAPER NUMBER		
RESTON, V	VA 2019	1	2841			

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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		Application No.	Applicant(s)	
		10/721,295	SUGIMOTO ET AL.	
	Office Action Summary	Examiner	Art Unit	
·		Tuan T. Dinh	2841	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence address	
WHI( - Exte after - If NC - Failt Any	HORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAPARTS OF THE MAILI	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirn will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	N. nely filed the mailing date of this communication D. (35.U.S.C. & 133)	
Status				
	•	action is non-final. nce except for formal matters, pro		5
Dienosit	ion of Claims	,	0.0.2.0.	
5)□ 6)⊠ 7)□	Claim(s) 1-17 is/are pending in the application.  4a) Of the above claim(s) 13-17 is/are withdraw Claim(s) is/are allowed.  Claim(s) 1-12 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or	n from consideration.	·	
Applicat	ion Papers			
10)□	The specification is objected to by the Examiner The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the correction Replacement drawing sheet(s) including the correction The oath or declaration is objected to by the Examiner	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d	.(t
Priority ι	under 35 U.S.C. § 119			
12)⊠ a)l	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been receive I (PCT Rule 17.2(a)).	on No ed in this National Stage	
2) 🔲 Notic 3) 🔯 Inforr	t(s) te of References Cited (PTO-892) te of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date 11/03,11/05,04/06.	4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	(PTO-413) ite atent Application (PTO-152)	

## **DETAILED ACTION**

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1. Applicant's election of Specie I (figures 1-3, claims 1-12) in the reply filed on 03/14/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA (figure 4) in view of Matsumoto (GB 2,265,760, submitted by applicant).

Regarding claims 1-12, PAP, figure 4 discloses a meter unit having a housing and an indicative portion (claims 5-12), a printed circuit board formed within the housing, the printed board having a plurality of components, a wiring pattern, regulator, and a high frequency circuit (CPU or IC), see figure 4.

APA does not disclose the printed circuit board comprising an electrical conductive membrane formed on an insulative membrane and connected to a ground pattern through a connection hole pattern.

Matsumoto shows an electromagnetically shielding printed circuit board as shown in figure 1 comprising a circuit board (1) having a ground layer (9) formed on an insulative layer (8) and connected to a ground pattern (4) on the through hole, see figure 1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a teaching of Matsumoto employed in the APA (figure 4) in order to reduce a noise of the component formed on the circuit board.

## Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Inoguchi, Kumazawa et al., and Ribak disclose related art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T. Dinh whose telephone number is 571-272-1929. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/721,295

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Tuan Dinh

May 22, 2006.